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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,074	07/24/2003	Joseph Samuel Incarnato		9770

7590 09/14/2004  
JOSEPH S. INCARNATO  
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EXAMINER

HENEGHAN, MATTHEW E

ART UNIT PAPER NUMBER

2134

DATE MAILED: 09/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE

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*07/2*

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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*10/626,074*

*7/24/2003*

*Joseph Incarnato*

EXAMINER

*Matthew Heneghan*

ART UNIT

PAPER

*2134*

*0*

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Commissioner for Patents

Art Unit: 2134

As per your request during the Applicant Interview conducted on 26 August 2004, I have composed a suggested replacement for claim 1 in your application that, based upon our discussion, would appear to encompass both the nature of your invention and the specific algorithm that it uses. I am further suggesting dependent claims 4 to 9. Existing claims 2 and 3 are not being treated at this time.

Though I am not currently aware of any grounds under which the claims below would be rejected as written, it should be noted that a thorough prior art search has not been conducted, and therefore it cannot be guaranteed that these claims will be allowable.

Claim 1. A method for using a fixed-length one-time pad for sending a variable-length enciphered transmission of a message in a first alphabet consisting of  $n$  distinct symbols to a recipient using a second alphabet consisting of  $n$  distinct symbols, the method comprising:

distributing identical matrices to both a sender and a recipient,

wherein the matrix consists of  $m$  rows and  $n$  columns,

wherein each row in the matrix contains every symbol of the second alphabet,

and wherein the symbols of the second alphabet are randomly distributed in each row;

distributing identical symbol arrays to both the sender and the recipient,

wherein each array consists of  $n$  elements,

and wherein each array contains every symbol of the first alphabet;

Art Unit: 2134

selecting an initial row index and an initial column index corresponding to a symbol in the matrix;

setting a current row index to the initial row index and a current column index to the initial column index;

for each symbol in the message and in a corresponding ciphertext,

adding the symbol's position in the array to the current column index,

subtracting  $n$  from the current column index if it no longer corresponds to a valid matrix column,

setting the ciphertext symbol to the symbol in the matrix at the current row index and current column index,

incrementing the current row index,

and subtracting  $m$  from the current row index if it no longer corresponds to a valid matrix row;

sending the ciphertext, the current row index, and the current column index to the recipient.

Skip claims 2 and 3....

Claim 4. The method of claim 1, wherein the matrix contains an equal number of rows and columns.

Claim 5. The method of claim 1, wherein the matrix contains 96 rows.

Claim 6. The method of claim 1, wherein the matrix contains 96 columns.

Claim 7. The method of claim 1, wherein the first alphabet and the second alphabet are the same.

Claim 8. The method of claim 1, wherein the first alphabet comprises a carriage return symbol and a space bar symbol.

Claim 9. The method of claim 1, wherein the second alphabet comprises a carriage return symbol and a space bar symbol.

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Please note that this letter does not change the due date for your response to the most recent office action, which was mailed by the Office on 15 July 2004. The three-month Shortened Statutory period for reply expires on 15 October 2004.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Heneghan, whose telephone number is (703) 305-7727. The examiner can normally be reached on Monday, Tuesday, Thursday, and Friday from 8:30 AM - 4:30 PM Eastern Time. Beginning in October 2004, the telephone number is being changed to (571) 272-3834.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse, can be reached on (703) 308-4789 (beginning in October, (571) 272-3838).

**Any response to this action should be mailed to:**

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P.O. Box 1450  
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**Or faxed to:**

(703) 872-9306

Until October, hand-delivered responses should be brought to Crystal Park 2, 2121 Crystal Drive, Arlington, VA 22202, Fourth Floor (Receptionist).


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900 (beginning in October, (571) 272-2100).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MEH



September 7, 2004



GREGORY MORSE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100